Kaiga Atomic Power Station site

3001. SHRI SUKOMAL SEN: Will the PRIME MINISTER be pleased to refer to the answer to Unstarred Question 426 given in the Rajya Sabha on the 24th February, 1994 and state:

(a) whether it is a fact that the selection of Atomic Power Station site at Kaiga was a mistake as the site has no automatic water supply sources and is facing acute water scarcity, threatening the unit itself; and

(b) what was the consideration for selecting such a site?

THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS, DEPARTMENTS OF ELECTRONICS AND OCEAN DEVELOPMENT (SHRI EDUARDO FALEIRO): (a) and (b) No, Sir. The source of cooling water for this site is Kali river. The site is situated on the bank of Kali river. At the time of selection of site, the State Government had agreed to complete the Kadra reservoir well before the commissioning of Unit-1 of the Kaiga Atomic Power Project. When completed, this reservoir will meet all the cooling requirements of the nuclear power station. Presently there is no shortage for construction and domestic water supply as these are drawn from the Kali river and bore-wells.

Promotion to irradiation technology

3002. SHRI S. S. SURJEWALA: Will the PRIME MINISTER be pleased to state:

(a) what are the practical uses to which the research in the field of atomic energy is being put in the field of agriculture in India;

(b) whether irradiation is being used to make the seeds of various vegetables, fruits and other agricultural produce insect/Pest free, to have a longer life and also to produce better quality, high yielding seeds in the country; if so, the details thereof; and

(c) whether Government propose to open a centre for providing above service to the farmers in the North-Western States of Haryana, Punjab, Rajasthan, Uttar Pradesh, Himachal Pradesh and Jammu and Kashmir?

THE MINISTER OF STATE IN THE MINISTRY OF CHEMICALS AND FERTILIZERS AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS, DEPARTMENTS OF ELECTRONICS AND OCEAN DEVELOPMENT (SHRI EDUARDO FALEIRO): (a) and (b) In addition to harnessing the energy of the atom for generation of Electricity, the Department of Atomic Energy is engaged in extending the application of nuclear energy to other areas such as medicine, industry and agriculture. In the field of agriculture, the main applications are:—

1. developing a large variety of crop plants by inducing genetic variability; many varieties of high yielding crop plants are being released for commercial cultivation;

2. improvement of fertilizer use efficiency and for biological nitrogen fixation; nuclear techniques using isotopes are also used to study plant-soil interaction thereby leading to better understanding of the role of the fertilizer;

3. irradiation of food products for prevention of post harvest loses due to insect and microbial damage and increase in shelf-life of perishable products;

4. monitoring the fate and persistence of pesticides in soil; and

5. quality control and delaying the ripening of fruits. Radiation and radioisotopes are being extensively used in different fields of agricultural research. Mutations occur in nature but their frequency is low. Through radiations this natural process could be accelerated. In this way several high yielding varieties have been evolved at Bhabha Atomic Research Centre using radiation induced mutations.